



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

November 24, 2003

Applicants : Kenneth S. MURPHY

For : THERMAL BARRIER COATING

Serial No. : 10/024 518

Group: 1775

Filed : Dec. 21, 2001

Examiner: McNeil

Confirmation No. 2151

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

RESPONSE TO OFFICE ACTION

Dear Sir:

Please amend the above application as follows:

IN THE CLAIMS

Amend the claims as follows:

1. (Currently Amended) A ceramic thermal barrier coating wherein at least a portion of the thermal barrier coating comprises a stabilized zirconia coating including yttria and hafnia in an amount of at least about 15 weight % effective to reduce thermal conductivity of the stabilized zirconia coating as compared to a similar stabilized zirconia coating having an impurity amount of hafnia.

2. (Cancelled)

3. (Previously presented) The thermal barrier coating of claim 1 wherein at least the portion thereof comprising said stabilized zirconia coating comprises about 15.8 to about 63.4 weight % hafnia, about 2.0 to about 36.6 weight % yttria, and balance zirconia.

4. (Previously presented) The thermal barrier coating of claim 3 wherein at least the portion thereof comprising said stabilized zirconia coating comprises about 34.3 to about 61.6 weight % hafnia, about 5.3 to about 11.8 weight % yttria, and balance zirconia.

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